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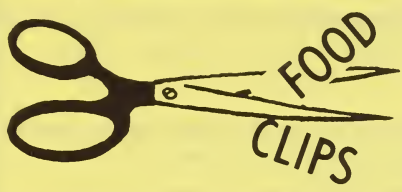
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Food and Home Notes

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Calcium is the most abundant mineral element in the body. Teamed up with phosphorus, it is largely responsible for the hardness of bones and teeth. Milk is outstanding as a source of calcium, according, to USDA.

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Remember--no one food provides all the nutrients in the amounts required for growth and health--you need a variety of foods each day to help assure that you are getting all the different nutrients.

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Cane and beet sugars,jellies, jams, candy and other sweets, honey molasses, and sirups are concentrated sources of sugar.

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The highest concentrations of cholesterol are found in organ meats--brain, liver, kidney, heart, sweetbreads, gizzards--and egg yolk. Shrimp is moderately high in cholesterol.

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Magnesium is found in good amounts in nuts, whole-grain products, dry beans, dry peas, and dark-green vegetables.

A "MOON" TREE?

One of the nation's first bi-centennial trees--grown from a seed that had been carried to the moon and back--was planted in May at Washington Square, Philadelphia, by the Forest Service of USDA. It was a sycamore "moon" tree.

Astronaut Stuart Roosa (in Apollo 14) carried a collection of tree seeds to the moon in 1971 to determine what effects prolonged weightlessness would have on seed germination and seedling growth. The seeds were returned to earth and germinated at the research installations located in Mississippi and California.

The "moon" tree planting is the first in a series of bicentennial events scheduled to focus attention on the importance of trees and forest resources to the nation. Trees grown from moon seeds are available to State Foresters to plant for bicentennial observances in their states. In addition to sycamore trees, there are loblolly pine, Douglas-fir, and redwood.

TEMPERATURE GUIDE TO FOOD SAFETY

°F	
250	
240	Canning temperatures for low-acid vegetables, meat, and poultry in pressure canner.
	Canning temperatures for fruits, tomatoes, and pickles in waterbath canner.
212	
	Cooking temperatures destroy most bacteria. Time required to kill bacteria decreases as temperature is increased.
165	
	Warming temperatures prevent growth but allow survival of some bacteria.
140	
125	Some bacterial growth may occur. Many bacteria survive.
	DANGER ZONE Foods held more than 2 hours in this zone are subject to rapid growth of bacteria and the production of toxins by some bacteria.
60	
	Some growth of food poisoning bacteria may occur.
40	
32	Cold temperatures permit slow growth of some bacteria that cause spoilage.
	Freezing temperatures stop growth of bacteria, but may allow bacteria to survive. (Do not store food above 10°F. for more than a few weeks.)
0	

**FOR FOOD SAFETY
KEEP HOT FOODS HOT
COLD FOODS COLD**

---Trace Elements
- In Your Diet

Trace elements are present in the body in minute amounts -- which is why they're called "trace" elements. They are important in that they help sustain life and promote growth, according to Agricultural Research Service scientists at the U.S. Department of Agriculture's Human Nutrition Laboratory in Grand Forks, North Dakota.

Scientists at the Laboratory are exploring the intricacies of nutrition in depth to find out how and why these trace elements are needed by the human body and how they bear directly on human health. The Laboratory--established five years ago as a National Public Research facility--focuses mainly on nutrition of persons in normal health. In addition to the research being done on animals there, there are also some collaborative and cooperative studies with Medical Schools.

Many trace elements interact in the intestines thus, and understanding of the absorption process could help in preventing deficiency of one element while attempts are made to supplement the diet with another element, according to Dr. Gary W. Evans. Dr. Evans ARS and biochemist Carole J. Hahn have made discoveries that may eventually lead to improvements in biological availability of zinc and copper in foods.

Dr. Kim P. Vo-Khactu has conducted research in the Laboratory's clinical chemistry unit where human volunteers are monitored for various studies. In the metabolic unit, research equipment to be used in the human nutrition studies includes a whole-body counter, which monitors naturally occurring radio-active isotopes in volunteers who have consumed foods containing them .

Information received from the metabolic studies may lead to changes in food technology and development of new highly nutritious foods from cheaper raw products than are now used.

ARSENIC AND _____ New Research

Arsenic has long been reconized as a poison. Now, however, there is strong evidence that arsenic may be essential for rats -- and just may serve an essential nutritional role for humans, according to findings by a chemist at USDA's Agricultural Research Service in Peoria, Illinois.

Dr. Forrest H. Nielson of the ARS Human Nutrition Laboratory reported on abnormalities that he observed in laboratory rats deprived of arsenic. Offspring of the arsenic-deprived rats had red blood cells which broke down more easily in salt solution than blood cells from control rats. They also had other physiological differences.

Most human food such as fruits, vegetables and cereals contain less than 0.5 ppm (parts per million) arsenic and rarely more than 1 ppm. Food products from animals generally contain less except those of marine origin which contain about 2-8 ppm.

Agricultural Research Service scientists also report studies that show arsenic residues do not accumulate excessively in plants or animals under normal circumstances.

The Gypsy Moth and Its Natural Enemies Agricultural Information Bulletin No. 381 USDA - Forest Service. Behavior patterns of the gypsy moth--from the time they begin to hatch around the first of May to mortality is explained. The entire story of the gypsy moth from the development and progression of an "outbreak"--a major insect threat--is described and illustrated. According to this publication the best way to cope with potential outbreak is to understand the insect. It's all in the book. For sale only by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 - Price 60 cents

NOTE: Additional information for the MEDIA and photographs (when applicable) may be obtained from: Shirley Wagener, Editor of Food and Home Notes, Room 535-A, Office of Communication/Press Division, U.S. Department of Agriculture, Washington, D.C. 20250. Or telephone 202-447-5898.